

**Add volume
to your voice!**

**PERMA POWER®
Sound Systems**

**for portable cordless
voice reinforcement**

★ *Model 80*



**A style for
every speaking need.**

**Now with complete
wireless flexibility**

**PERMA POWER®
Electronics Inc.**

5615 West Howard Avenue

Chicago, Illinois 60648

Telephone (312) 647-9414

Perma Power®

Sound Systems

offer the contemporary solution to these familiar voice-reinforcement needs

Clear, powerful, natural sound

Perma Power Systems sound good!

You talk without strain...your audience hears without strain. Your message comes through clearly and intelligently.



Cordless design... for use anywhere

Perma Power Sound Systems are designed for battery operation, so they can be used anywhere, indoors or out. You never need to search for an outlet, trip over a wire, or look for an engineer to hook you up and plug you in. Ordinary flashlight batteries ("D" cells) are specified, for ready availability anywhere in the world. The recommended alkaline type batteries will power your system for 200 hours...a full year of normal usage! If you wish, however, you can add an adapter to power your sound system with ordinary household current (120 V ac).



Simple operation... for use by anyone

Perma Power Systems are easy to handle, to set up, and to use. You turn them on...adjust the volume...and talk. There is no baffling array of knobs and dials to confuse the operator—particularly significant when the equipment is used by people unaccustomed to platforms and microphones.



Total freedom of movement... with wireless mike add-on

Perma Power Systems let you wander while you speak...add our TOA FM Wireless Microphone and Tuner, and you can roam the room with complete wireless mobility!

Perma Power® Reading Table Systems

Roving Rostrum Model S-122

**Luggage-styled
portable sound system
that opens up to
become its own
lectern.**

**Covers audiences
up to 1000...
avoids feedback
problems often prevalent
in low-ceilinged
rooms.**

Whether you use a sound system regularly, or have never used one, the S-122 is as easy to use as 1-2-3. Just plug in the microphone...turn it on...talk to audiences as large as 1,000—indoors or out. Includes 2 speakers (use either or both), professional mike, solid state amplifier. Weighs only 23 lbs. with batteries.



Specifications:

AMPLIFIER: Integral; 35 watt nominal battery powered output, 12.0/40.0 watts with A.C. adapter at 5% THD into 8 ohms (Per American Standards Institute PH7.2-1974). Transistor plus IC design.

Response: Equalized for natural sound at voice frequencies.

Controls: On-Off; Volume.

2 Inputs: One for microphone; one for tape, tuner or phono.

3 Outputs: One for auxiliary speaker only; one for auxiliary and integral speakers; one for tape recorder.

Power Source: Ten "D" size flashlight batteries; alkaline type provides up to 200 hours operation for a full year's use. 120V ac adapter available.

MICROPHONE: Model S-2020; Shure professional dynamic cardioid with 10-ft. cable, frequency response 50-15,000 Hz, supplied with adjustable flexible rod microphone holder and lavalier holder.

SPEAKERS: Two high efficiency 6" x 9" units with 10-oz. ceramic magnets. Each can handle full amplifier power. One built into reading table, one in cover with 40-ft. cable. Special anti-feedback speaker housing allows high volume without howls.

CONSTRUCTION: Molded scuff-proof black luggage type plastic; retractable legs for height adjustment.

Dimensions: 8 $\frac{7}{8}$ " high, 16 $\frac{3}{4}$ " wide, 17 $\frac{1}{4}$ " deep.

WEIGHT: 23 lbs. (with batteries).

Order Model S-122

Also available with lower cost Perma Power Model S-2090 microphone:

Order Model S-112

Model S-1100, 120V ac reading light available separately.

Perma Power® Reading Table Systems

Sound Column Lectern Model S-500

A total professional sound system that moves easily from the meeting room to the auditorium... easily covers audiences up to 3000!

Distinctive styling combines with superior audio in this self-contained system, which projects clear realistic sound equally throughout the audience...all the way to the last rows. Beautiful walnut finish of scratch and fire resistant melamine; adjustable height (36 to 46 inches); rolls from place to place on hidden wheels. Easy to operate sound system features one-knob control; solid state amplifier, 6 speaker sound-column, professional dynamic cardioid mike.

Specifications

AMPLIFIER: Model S-702; 35 watts nominal battery powered output. Using A.C. adapter: 12 watts continuous, 40 watts momentary power output at 5% THD into 8 ohms. (Per American National Standards Institute PH7.2-1974.) Transistor plus IC design.

Response: Equalized for natural sound at voice frequencies.

Controls: On-Off; Volume.

2 Inputs: One input for ceramic or dynamic microphone; one auxiliary input for phono, tuner, tape recorder, etc.

3 Outputs: 2 phone jack outputs for 4, 8 or 16 ohm speakers; one for tape recorder.

Power Source: Ten "D" size flashlight batteries; alkaline type provides up to 200 hours operation for a full year's use. 120V ac adapter available.



MICROPHONE: Model S-2020; Shure Professional dynamic cardioid with 10-ft. cable, frequency response 50-15,000Hz, supplied with adjustable flexible rod microphone holder and lavalier holder.

SPEAKERS: Six 5" speakers in frequency tapered sound column.

CONSTRUCTION: All wood, table and base covered in walnut-finish melamine, column in vinyl finish.

Lectern Dimensions: 15 inches deep, 21 inches wide at base.

Reading Table Dimensions: 13 inches deep, 20 inches wide.

Height: Adjustable 36 inches to 46 inches.

Weight: 76 lbs. (with batteries).

Order Model S-500

Model S-1100, 120V ac reading light available separately.

Modular Lectern Model S-520 /

Choose the majestic complete floor lecturer with distinctive Reading Table and handsome Base or the Reading Table alone...

Add the optional Model S-210A Sound System — matched to the Reading Table— for audiences up to 1000

The Perma Power Modular Lectern provides a distinctive and impressive appearance, compatible with the status of the most important lecturer.

Use the Reading Table Module on a table-top, desk or dais. All wood with rich walnut veneer, it sits firmly on any flat surface, or on the companion Perma Power Base Module.

The unit includes a reading lamp, and is equipped to accommodate a microphone holder. The attractive metal grille front is designed so loudspeakers can be housed and used right in the Module. The top front of the reading table slides open for easy access to the loudspeaker housing. And on the talker's side, there's plenty of room for a public address amplifier and for miscellaneous papers or supplies.

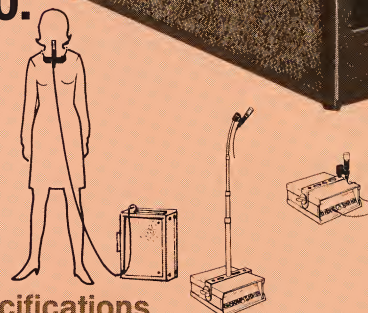
The optional matching Base Module is equally sturdy and attractive. Built of the same all wood, walnut veneer construction, the Base is grooved to accommodate the Reading Table firmly. Screw inserts allow permanent attachment of the Reading Table, if desired. Concealed wheels aid movement from room to room; and there is a shelf for extra supplies, briefcases, etc.

Highly Portable Systems

Sound Attaché P.A. Model S-210A

Compact yet powerful,
this complete P.A. system
in an attaché case
covers audiences to 1000.

It's ideal for demonstrations or for speakers who work without a lectern. You can use the microphone in the lavalier or in the desk or floor stand holder; all included in the attractive case, which also houses the removable solid state amplifier and high efficiency loud-speaker...



Specifications

AMPLIFIER: Model S-702; 35 watts nominal battery powered output. Using A.C. adapter: 12 watts continuous, 40 watts momentary power output at 5% THD into 8 ohms. (Per American National Standards Institute PH7.2-1974.) Transistor plus IC design.

Response: Equalized for natural sound at voice frequencies.

Controls: On-Off; Volume.

2 Inputs: One input for ceramic or dynamic microphone; one auxiliary input for phono, tuner, tape recorder, etc.

3 Outputs: 2 phone jack outputs for 4, 8 or 16 ohm speakers; one for tape recorder.

Power Source: Ten "D" size flashlight batteries; alkaline type provides up to 200 hours operation for a full year's use. 120V ac adapter available.

MICROPHONE: Model S-2090; Low impedance dynamic cardioid with 10-ft cable; lavalier cord to wear around neck. May be located hundreds of feet from amplifier by using (optional) extension cables.

SPEAKER: 6" x 9" high efficiency full fidelity speaker in anti-feedback housing built into case. 40 feet of cable supplied for operation away from amplifier. Additional speaker may be added.

MICROPHONE STAND: 2 piece adjustable assembly fits onto amplifier bracket (amplifier becomes the base), plus flexible rod (gooseneck) microphone holder; also includes adapter to use amplifier as desk stand.

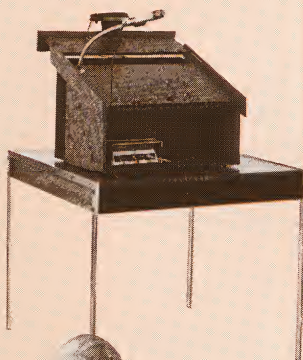
CONSTRUCTION: All wood case with black vinyl finish.

DIMENSIONS: 12" High, 19" wide, 4 1/4" deep.

WEIGHT: 22 lbs. (with batteries).

Order Model S-210A

S-530



Module



Specifications

READING TABLE MODULE Includes microphone connector stud for flexible rod microphone holder and shaded reading light supplied with 25-watt showcase bulb (for 120V ac operation only). Pre-drilled hole for wires.

CONSTRUCTION: All wood with scratch and burn resistant melamine walnut veneer.

DIMENSIONS: Height: 19" at front (without lamp) sloping to 11" at speaker's side. Width: 25". Depth: 19".

WEIGHT: 30 lbs.

Order Model S-520

BASE MODULE

CONSTRUCTION: Made of natural hardwood with walnut veneer; grooved to accept Lectern; has built-in shelf, concealed wheels.

DIMENSIONS: Height: 31" Width: 23" Depth: 18"

WEIGHT: 35 lbs.

Order Model S-530



Perma Power® Highly Portable Systems

Announcer Model S-220

10 pounds of portable
p.a. power...ideal for
tours, classrooms,
demonstrations.
Covers audiences
up to 150.
Works on transistor
radio batteries or A.C.

Here's a complete compact voice re-
inforcement system in a smartly-styled
molded case that does more for less
money than any other system we offer.
Offers unusually natural-sounding am-
plification, indoors or out.



Specifications

AMPLIFIER: Integral; 30 watts nominal battery powered output, 10.0/35.0 watts power output at 5% TDS into 8 ohms (Per American National Standards Institute PH7.2-1974). Transistor plus IC design. Automatic level control.

Response: Equalized for natural sound at voice frequencies.

Controls: On-Off; Volume.

3 Inputs: One for extension microphone only; one for extension and wired-in microphones; one for phono or tape.

1 Output: For tape recorder.

Power Source: Works on 120V ac or on eight 9 volt transistor radio batteries. Built-in trickle charge circuit for battery life renewal when plugged into A.C. Batteries will give 200 hrs. of use, when recharged after every 4 hours of use.

UL Listed.

MICROPHONE: Sensitive dynamic cardioid wired-in microphone with 15 ft. cord.

SPEAKER: 9" oval, ceramic magnet, in anti-feedback housing.

CONSTRUCTION: Molded scuff-proof black luggage type plastic.

DIMENSIONS: 12" x 19" x 4".

WEIGHT: 10 lbs. (with batteries).

Order Model S-220

Voice Carrier Model S-230

All the
advantages of
sound-column
audio penetration
in a completely
portable component
system. Covers
audiences up
to 3000!

Here in one rugged carrying case are all the components of a professional voice reinforcement system. Choose the Voice Carrier where maximum visibility and freedom of movement are desired, where the audience will be large, or where acoustic problems are prevalent.

Specifications

AMPLIFIER: Model S-702; 35 watts nominal battery powered output. Using A.C. adapter: 12 watts continuous, 40 watts momentary power output at 5% THD into 8 ohms. (Per American National Standards Institute PH7.2-1974.) Transistor plus IC design.

Response: Equalized for natural sound at voice frequencies.

Controls: On-Off; Volume.

2 Inputs: One input for ceramic or dynamic microphone; one auxiliary input for phono, tuner, tape recorder, etc.

3 Outputs: 2 phone jack outputs for 4, 8 or 16 ohm speakers; one for tape recorder.

Power Source: Ten "D" size flashlight batteries; alkaline type provides up to 200 hours operation for a full year's use. 120V ac adapter available.

MICROPHONE: Model S-2020; Shure professional dynamic cardioid with 10-ft cable, lavalier cord to wear around neck. May be located hundreds of feet from amplifier by using extension cables.

MICROPHONE STAND: Model S-1073; 2 piece adjustable assembly with 3 folding legs; flexible rod and microphone holder.



Highly Portable Systems

Half-Mile Hailer Model S-610

Projects sound further,
louder, clearer than
horn hailer...
doesn't block
vision...

perfect for
crowd control,
athletics and
other outdoor use.

The Perma Power Half-Mile Hailer is a weatherproof, abuse-proof *component* system that gives you undistorted, natural sound, and lets you avoid the mechanical feed-back problems that limit volume in typical megaphones. It's easy to use, too—you need hold only the microphone, not a whole bulky horn, so neither vision nor sound is blocked—yours or your listeners. Comes complete with gripper handle and shoulder strap.

Specifications

AMPLIFIER: Model S-702; 35 watts nominal battery powered output. Using A.C. adapter: 12 watts continuous, 40 watts momentary power output at 5% THD into 8 ohms. (Per American National Standards Institute PH7.2-1974.) Transistor plus IC design.

Response: Equalized for natural sound at voice frequencies.

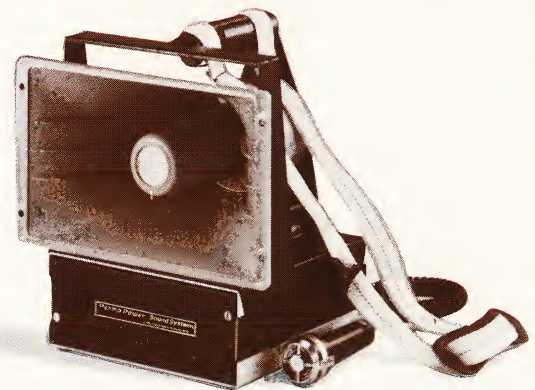
Controls: On-Off; Volume.

2 Inputs: One input for ceramic or dynamic microphone; one auxiliary input for phono, tuner, tape recorder, etc.

3 Outputs: 2 phone jack outputs for 4, 8 or 16 ohm speakers; one for tape recorder.

Power Source: Ten "D" size flashlight batteries; alkaline type provides up to 200 hours operation for a full year's use. 120V ac adapter available.

MICROPHONE: Model S-2080; Cardioid probe-type, noise-cancelling, hand-held microphone, supplied with 8' coil cord, push-to-talk switch.



SPEAKER: Model S-1260; Weatherproof horn speaker, capable of handling full amplifier output; Removable for operation away from Amplifier with use of extension cord.

CONSTRUCTION: Removeable metal bracket attaches to amplifier with screw knobs; gripper handle and shoulder strap included.

DIMENSIONS: 11½" high, 11" wide, 9" deep.

WEIGHT: 14 lbs. (with batteries).

Order Model S-610



SPEAKER: Model S-1200; Six high efficiency 5" loudspeakers positioned in frequency tapered sound column for highly penetrating sound without dead spots or echoes...40 feet of cable supplied for operation away from amplifier.

CASE: Rugged molded luggage type black plastic. 33" x 10" x 11½"

WEIGHT: 42 lbs. (with batteries).

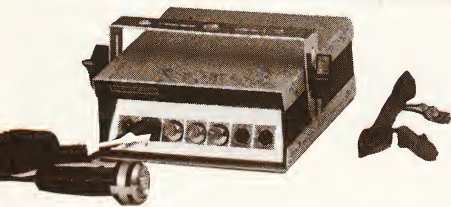
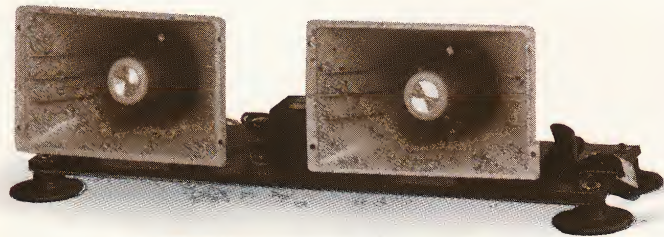
Order Model S-230

Perma Power® Special Purpose Systems

Sound Cruiser Mobile P.A. Model S-310

**Make any car a sound truck
in 45 seconds. Ideal for cars,
trucks, buses, boats.**

Speaker assembly clamps onto vehicles, amplifier plugs into cigarette lighter socket. System tailored for maximum voice penetration and intelligibility.



Specifications

AMPLIFIER: Model S-302; 32 watts continuous power output at 5% THD into 8 ohms. Using self-contained battery adapter: 35 watts nominal battery powered output at 5% THD into 8 ohms. (Per American National Standards Institute PH7.2-1974.) Transistor plus IC design.

Response: Equalized for natural sound at voice frequencies.

Controls: On-Off/Tone; Master Volume; Auxiliary Volume.

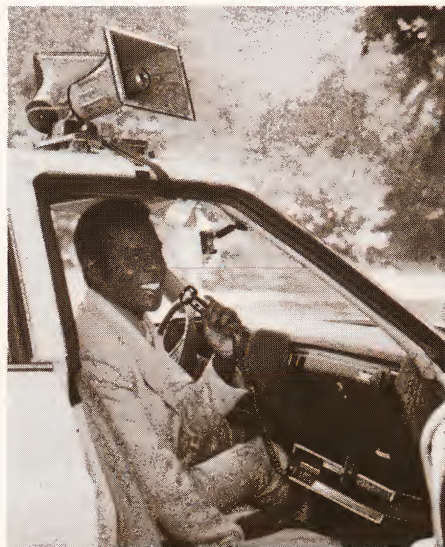
2 Inputs: One input for ceramic or dynamic microphone; one auxiliary input for radios, tuners, recorders, etc.

2 Outputs: For 8 or 16 ohm speakers.

Power Source: 12V dc; plugs into auto cigarette lighter socket. Terminals provided for permanent installation. 120V ac and flash-light battery power packs available.

Size: 8 $\frac{3}{8}$ " wide x 3 $\frac{1}{4}$ " high x 8 $\frac{3}{4}$ " deep.

Mounting: Handle supplied for easy carrying or ready mounting under dash.



SPEAKERS: Model S-1210; Two weather-proof horn speakers that swivel and lock in any direction, can handle full amplifier output, mounted on car-top carrier ready to clamp to car.

MICROPHONE: Model S-2080; Cardioid probe-type, noise-cancelling hand-held microphone, supplied with 8" coil cord, push-to-talk switch, mounting clip.

WEIGHT: Complete system, 25 lbs.

Order Model S-310

Paging System with background music Model S-410

**A complete
low-cost paging
system for
restaurants, clubs,
stores, offices,
plants.**

**Simple plug-
together hook-up!
Add music from
any radio, phono
or tape player.**

Here's a simple, sensible, economical paging system that you can hook-up in minutes, without tools. Supplied with 2 speakers; add up to 6 more to cover large areas without detracting from sound at any location. Individual amplifier adjustments for music volume and paging volume; response tailored for unobtrusive background music with automatic paging override.



Amplifiers

m
ic capability



Specifications

AMPLIFIER: Model S-402; 18 watts continuous, 52 watts momentary power output at 5% THD into 4 ohms. (Per American National Standards Institute PH7.2-1974.) 32 watts continuous power output with dc power source. Has 12V battery terminals with built-in trickle charger, ideal where stand-by power is required in case of power failure. Transistor plus IC design.

Response: Equalized for natural sound at voice frequencies.

5 Controls:: On-Off/Tone; Microphone Volume; Phono Volume; Input Selector for tuner or phono; Tuner Level.

3 Inputs: One for microphone, low impedance; one for tape playback or tuner, high impedance; one switchable for magnetic or ceramic phono.

2 Outputs: Two jacks for 32 ohm speakers; screw terminals for additional speakers.

Power Source: 120V ac; Will accept 12V dc.

Size: 8 $\frac{3}{4}$ " wide x 3 $\frac{1}{4}$ " high x 8 $\frac{3}{4}$ " deep.
UL Listed.

MICROPHONE: Dynamic paging desk stand mike with press-to-talk bar, 6 ft. cable.

SPEAKERS: Two 32 ohm background music 6" x 9" speakers with ceramic magnets in walnut vinyl bass reflex enclosures. Each has jack for additional Perma Power S-1240 speaker; system accommodates up to eight.

WEIGHT: Complete system 42 lbs.

Order Model S-410

Solid State Amplifiers Models S-302, S-402, S-702

Build your own sound system with Perma Power Solid State Amplifiers and Matching Components



Mobile and Marine D.C. Amplifier

Plugs right into auto cigarette lighter... ideal for sound trucks, boats, buses, planes. Designed for maximum voice penetration and intelligibility.

MODEL S-302

Amplifier: 32 watts continuous power output at 5% THD into 8 ohms. Using self-contained battery adapter: 35 watts nominal battery powered output at 5% THD into 8 ohms. (Per American National Standards Institute PH7.2-1974.) Transistor plus IC design.

Response: Equalized for natural sound at voice frequencies.

Controls: On-off/tone; master volume; auxiliary volume.

Microphone Input: For dynamic (low impedance/50 to 50,000 ohms) or ceramic (high impedance/10,000 to 100,000 ohms) microphone; 105 dB gain.

Auxiliary Inputs: High impedance, for radios, tuners, recorders, etc. 0.5 megohms, full power at 0.3V.

Outputs: 2 phone jack outputs for 4, 8 or 16 ohm speakers or recorders.

Signal-to-Noise Ratio: 55 dB.

Power Source: 12 V dc-idle current 40 mA. Plugs into auto cigarette lighter socket; polarity and over voltage protected. Terminals provided for permanent installation. (alternate 120V ac and flashlight battery power packs available.)

Mounting: Carrying handle serves as mounting bracket for easy installation under dash.

Size: 8 $\frac{3}{4}$ " side x 3 $\frac{1}{4}$ " high x 8 $\frac{3}{8}$ " deep.

Weight: 8 lbs.

Order Model S-302



Stationary A.C. Amplifier

Designed for background music with automatic paging override. Works on 120V ac...also has battery terminals. Accommodates 8 speakers without detracting from sound level at any location. Has built-in battery charger, On-Off signal. UL listed.

MODEL S-402

Amplifier: 18 watts continuous, 52 watts momentary power output at 5% THD into 4 ohms. (Per American National Standards Institute PH7.2-1974.) 32 watts continuous power output with dc power source. Has 12V battery terminals with built-in trickle charger, ideal where stand-by power is required in case of power failure. Transistor plus IC design.

Response: Equalized for natural sound at voice frequencies.

Controls: On-off/tone; microphone volume; music volume; selector for tuner or phono; tuner level.

Microphone Input: For dynamic (low impedance/50 to 50,000 ohms) or ceramic (high impedance/10,000 to 100,000 ohms) microphone; 105 dB gain.

Auxiliary Inputs: High impedance, 1 megohm (0.3V. for full output). 3-position selector switch for magnetic phono, ceramic phono (both RIAA equalized), tuner or tape recorder.

Outputs: 4, 8 and 16 ohms: 25 V.C.T. and 70.7 V line; 600 ohms telephone line (all output balanced).

Signal-to-Noise Ratio: 55 dB.

Power Source: 55 watts. 105-125 V ac 50-60 Hz; 10-16 V dc.

Mounting: Sits in desk drawer or on table top. Carrying handles serves as mounting bracket for permanent installation.

Size: 8 $\frac{3}{4}$ " wide x 3 $\frac{1}{4}$ " high by 8 $\frac{3}{8}$ " deep.

Weight: 9 lbs.

Order Model S-402



Portable/Cordless Amplifier

Flashlight battery powered general purpose amplifier covers audiences to 3,000...convertible for 120V ac or 12V auto battery operation. Will work for a year on one set of alkaline batteries (200 hours).

MODEL S-702

Amplifier: 35 watts nominal battery powered output. Using A.C. adapter: 12 watts continuous, 40 watts momentary power output at 5% THD into 8 ohms. (Per American National Standards Institute PH7.2-1974.) Transistor plus IC design.

Response: Equalized for natural sound at voice frequencies.

Controls: On-Off; Volume.

Microphone Input: For dynamic (low impedance/50 to 50,000 ohms) or ceramic (high impedance/10,000 to 100,000 ohms) microphone; 105 dB gain.

Auxiliary Inputs: Phono, tuner, tape recorder, etc. (requires 0.3 volt for full output.)

Outputs: 2 phone jack outputs for 4, 8, or 16 ohm speakers or recorder.

Signal-to-Noise Ratio: 55 dB.

Power Source: Ten flashlight batteries, size "D"; 40 mA idle current; alternate 120V ac or 12V dc power packs available.

Mounting: Handle supplied for easy carrying. Unit can be mounted easily using handle as bracket.

Size: 8 $\frac{3}{4}$ " wide x 3 $\frac{1}{4}$ " high by 8 $\frac{3}{8}$ " deep.

Weight: 8 lbs. with batteries.

Order Model S-702

Perma Power[®] Accessories

Compatible Accessories

All Perma Power sound systems are compatible with any of these accessories and the components of each system are interchangeable with those of our other systems. You can add any microphone and/or any speaker, to change the characteristics and utility of the system.

This is accomplished, first, by making the connectors compatible, and second, by correlating the acoustical characteristics of the components and accessories in any combination.

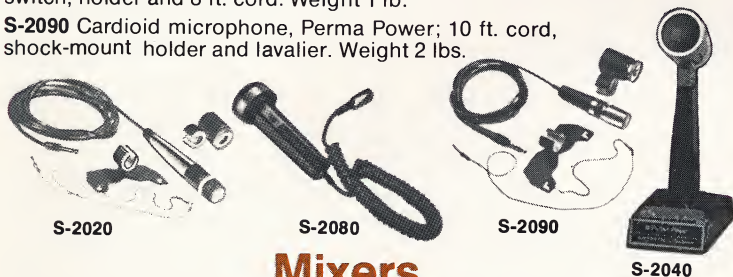
Microphones

S-2020 Cardioid microphone, Shure Unidyne; 10 ft. cord, shock-mount and lavalier. Weight 2 lbs.

S-2040 Desk stand paging microphone; push-to-talk switch, 6 ft. cord (as used in S-410). Weight 3 lbs.

S-2080 Cardioid probe-type microphone for mobile use; push-to-talk switch, holder and 8 ft. cord. Weight 1 lb.

S-2090 Cardioid microphone, Perma Power; 10 ft. cord, shock-mount holder and lavalier. Weight 2 lbs.



Mixers

S-1020 Mike extension kit; includes S-2020 mike, S-2120 mixer & extension cord. Weight 4 lbs.

S-1030 Mike extension kit; includes S-2090 mike, S-2120 mixer & extension cord. Weight 3 lbs.

S-1040 Mike mixer; individual volume controls for 4 mikes. Weight 2 lbs.

S-2120 Mike mixer for 2 low Z microphones. Weight 1 lb.



Microphone Stands

S-1062 Floor stand shaft assembly for S-210 and S-210A. Weight 3 lbs. (not illustrated)

S-1073 Microphone stand (as used in S-230). Weight 3 lbs. (not illustrated)

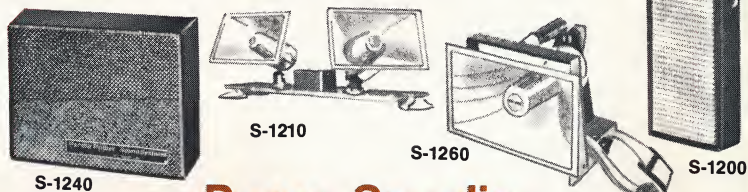
Speakers

S-1200 6 speaker sound column, 8 ohms, with carrying handle & 40 ft. cord. Weight 23 lbs.

S-1210 Car top twin horn speaker assembly, 4 ohms, with roof clamps. Weight 19 lbs.

S-1240 Background music speaker in enclosure 8 or 32 ohm (selector switch) with 100 ft. cord. Weight 12 lbs.

S-1260 Horn speaker, 8 ohms, complete with mounting assembly, as used in Model S-610. Weight 9 lbs.



Power Supplies

S-1400 A.C. adapter for models S-112 & S-122. Weight 6 lbs.

S-1410 A.C. adapter for models S-210, 230, 302, 310, 500, 610, & 702. Weight 4 lbs.

S-1420 Battery pack holder for S-210, 230, 302, 310, 500, 610 & 702. Weight 1 lb.

S-1422 12 V dc. adapter for S-210, 230, 302, 310, 500, 610 & 702. Weight 1 lb. (not illustrated)

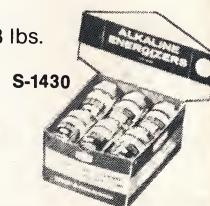


Batteries

Alkaline batteries are recommended to provide considerably longer operating life than standard zinc carbon batteries.

S-1430 Set of 10 alkaline "D" cell batteries. Weight 3 lbs.

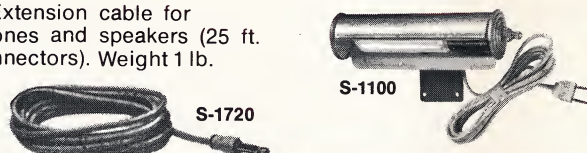
S-1480 Set of 8 alkaline 9-volt batteries, for S-220. Weight 1 lb. (not illustrated)



Miscellaneous

S-1100 A.C. Reading light for S-112, 122, 500 & 520. Weight 1 lb.

S-1720 Extension cable for microphones and speakers (25 ft. with connectors). Weight 1 lb.



NOTES ON ACCESSORIES:

Accessories manufactured by other companies can also be used with Perma Power equipment only if the proper wiring connections are used.

The microphone inputs for Perma Power equipment are three conductor phone jacks. To assure compatibility, the center, or "ring" connection, rather than the sleeve connection, is used for the shield. This allows wiring at the speaker inputs to prevent speaker voltage accidentally across a microphone.

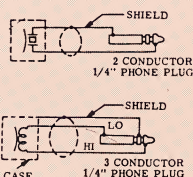
MICROPHONE CONNECTIONS

LOW IMPEDANCE: Use dual conductor shielded microphone cable. Shield is connected to the ring, not to the sleeve.

HIGH IMPEDANCE: Use single conductor shielded microphone cable.

NOTE: If your microphone offers a choice of impedances, choose the one closest to 50 ohms.

Any low impedance balanced microphone may be used if wired in this manner. However, other microphones may not perform as well as Perma Power units, no matter how expensive or how well their specifications read, since they aren't custom-tailored to the matching components.



Some available professional sound mixers provide microphone level outputs. If these are balanced, they may be connected to the input of Perma Power systems just as one would an ordinary microphone. Furthermore, if the mixers have low impedance inputs, Perma Power microphones can be connected to them with suitable adapter cables. Remember that the high side of the Perma Power microphone is connected to the tip, the low side to the sleeve, and the shield to the ring.

There are extension cables available having three conductor jacks at one end and three conductor plugs at the other end. If these cables connect the shield to the sleeve, they should not be used with Perma Power equipment. Their use will result in unshielded microphone lines and consequent pick up of noise, radio stations, etc. Similarly, one should check the wiring of any microphones provided with three conductor plugs by manufacturers other than Perma Power.

SPEAKER CONNECTIONS

PHONE JACK OUTPUTS: Use lamp cord or similar wire. Wire 8 ohm speakers to two conductor 1/4" phone plugs. Insert in speaker jacks.



The loudspeaker outputs are also phone jacks but are two conductor types.

PERMA POWER Electronics Inc.

COMMERCIAL/INSTITUTIONAL NET PRICES
EFFECTIVE AUGUST 1, 1979
 (prices subject to change without notice)

MODEL NO.	DESCRIPTION	SHIPPING WEIGHT	USER PRICE
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Reading Table Systems

S-112	ROVING ROSTRUM, with S-2090, omni-directional dynamic microphone, complete except batteries.	22 lbs.	\$292.00
S-122	ROVING ROSTRUM, with S-2020, Shure cardioid dynamic microphone, complete except batteries.	22 lbs.	342.00
S-500	CORDLESS ELECTRONIC SOUND COLUMN LECTERN, with S-2020, Shure cardioid dynamic microphone, complete except batteries.	93 lbs.	543.00
S-520	MODULAR LECTERN READING TABLE MODULE**	30 lbs.	160.00
S-530	MODULAR LECTERN BASE MODULE	50 lbs.	147.00

** Converts to complete sound system with addition of Model S-210A.

Highly Portable Systems

S-210A	SOUND ATTACHE' (DIPLOMAT), with S-2090, cardioid dynamic microphone and microphone floor stand shaft assembly, except batteries.	22 lbs.	\$257.00
S-220	MESSAGE ANNOUNCER, with Perma Power cardioid microphone, complete except batteries.	10 lbs.	178.00
S-230	VOICE CARRIER, with S-2020, Shure cardioid dynamic microphone, complete except batteries.	43 lbs.	392.00
S-610	HALF MILE HAILER, with amplifier, speaker, S-2080, push-to-talk microphone with 8 ft. coil cord, complete except batteries	14 lbs.	207.00

Special Purpose Systems

S-310	SOUND CRUISER, complete system, with S-2080, noise cancelling push-to-talk microphone.	27 lbs.	\$340.00
S-410	BACKGROUND MUSIC AND PAGING, complete system, includes amplifier, S-2040 paging microphone and 2 speakers, wired	44 lbs.	387.00

Amplifiers

S-302	MOBILE & MARINE AMPLIFIER as used in Model S-310.	8 lbs.	\$165.00
S-402	BACKGROUND MUSIC & PAGING DUAL POWERED A.C. & D.C. AMPLIFIER as used in Model S-410.	10 lbs.	185.00
S-702	CORDLESS PORTABLE AMPLIFIER as used in Model S-210A, S-230, S-500 and S-610	6 lbs.	137.00

Accessories

Microphones

S-2020	Cardioid Microphone, Shure Unidyne; 10 ft. cord, shock-mount and lavalier (used in S-122, 230 & 500)	2 lbs.	\$ 81.00
S-2040	Desk stand paging Microphone; push-to-talk switch, 6 ft. cord (used in S-410)	3 lbs.	60.00
S-2080	Cardioid Probe-type Microphone for mobile use; push-to-talk switch, holder and 8 ft. cord (used in S-310 & 610)	1 lb.	30.00
S-2090	Cardioid Microphone, Perma Power; 10 ft. cord, shock-mount holder and lavalier (used in S-112 & 210A)	2 lbs.	38.00

Mixers

S-1020	Mike extension kit; includes S-2020 mike, S2120 mixer & S-1720 extension cord.	4 lbs.	\$108.00
S-1030	Mike extension kit; includes S-2090 mike, S-2120 mixer & S-1720 extension cord.	3 lbs.	67.50
S-1040	Mike mixer; individual volume controls for 4 mikes.	2 lbs.	37.50
S-2120	Mike mixer for 2 low Z microphones.	1 lb.	15.00

Mike Stands

S-1062	Floor stand Shaft Assembly for S-210 and S-210A	3 lbs.	\$ 37.50
S-1073	Microphone Stand (as used in S-230)	4 lbs.	18.00

Speakers

S-1200	6 speaker sound column with carrying handle & 40 ft. cord (used in S-230)	24 lbs.	\$ 87.00
S-1210	Car top twin horn speaker assembly with roof clamps (used in S-310)	19 lbs.	150.00
S-1240	Background music speaker in enclosure; with 100 ft. cord (used in S-410)	15 lbs.	67.50
S-1260	Horn speaker, complete with mounting assembly, (used in Model S-610)	9 lbs.	73.50

Power Supplies

S-1400	A.C. converter for models S-112 & S-122	6 lbs.	\$ 50.00
S-1410	A.C. converter for models S-210A, 230, 302, 310, 500, 610 & 702	4 lbs.	50.00
S-1420	Battery pack holder for S-210A, 230, 302, 310, 500, 610 & 702	1 lb.	15.00
S-1442	12 volt D.C. converter for S-210A, 302, 310, 500, 610 & 702	1 lb.	43.00

Batteries

S-1430	Set of 10 alkaline "D" cell batteries for S-112, 122, 210A, 230, 500, 610 & 702	3 lbs.	\$ 12.00
S-1480	Set of 8 alkaline 9-volt batteries, for S-220	1 lb.	16.00

Miscellaneous

S-1100	A.C. Reading light for S-112, 122, 500 & 520	1 lb.	\$ 13.50
S-1720	Extension cable for microphones and speakers (25 ft. with connectors)	1 lb.	13.50

DISTRIBUTED BY

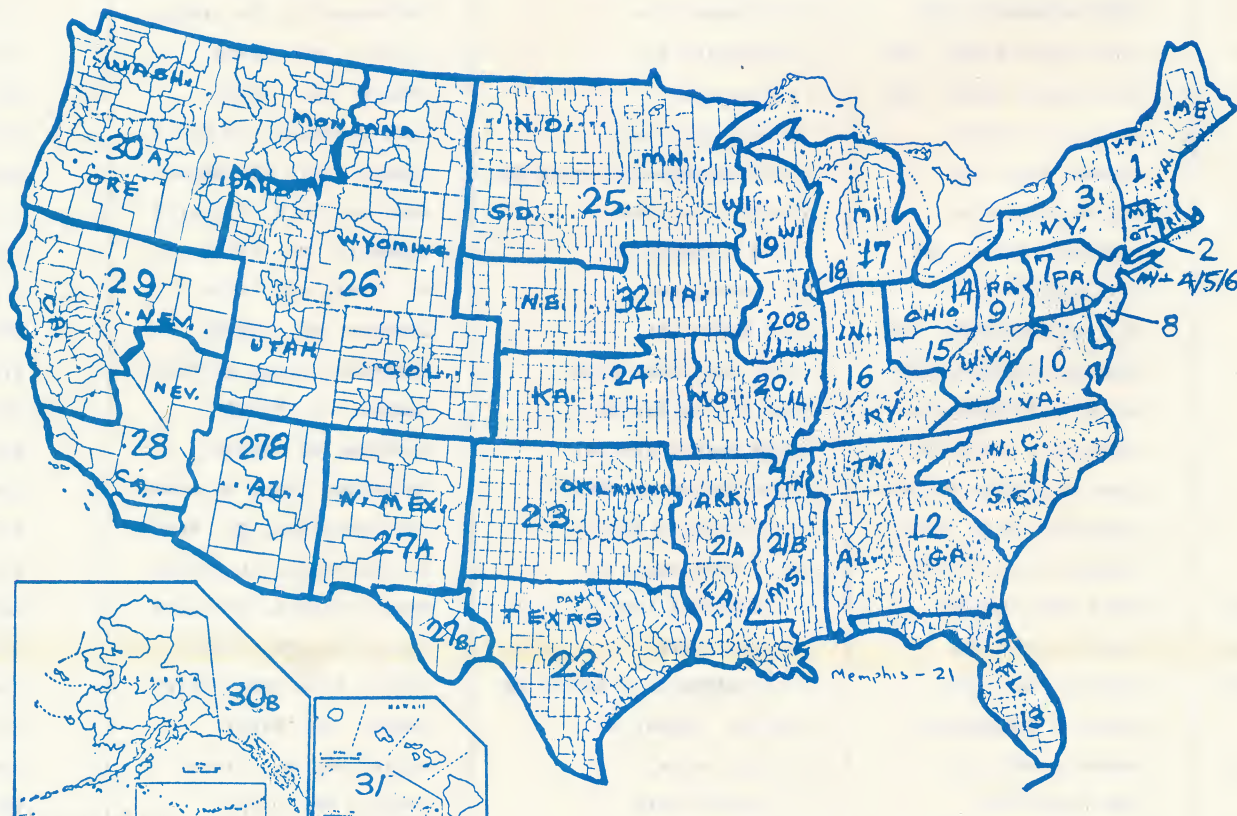
**PERMA POWER
Electronics Inc.**

5615 West Howard Avenue, Chicago, Illinois 60648
 Telephone (312) 647-9414

PERMA POWER® Electronics Inc. REPRESENTATIVES

STATE	REPRESENTATIVE	ADDRESS	CITY, STATE, ZIP	PHONE
ALABAMA	ADAMS & ASSOCIATES	3607C Mountain Head Ln.	Birmingham, AL 35216	205/979-2459
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STATE	REPRESENTATIVE	ADDRESS	CITY, STATE, ZIP	PHONE
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OHIO (Southern)	MANDABACH-LEHNER CO.	155 S. Hamilton Rd.	Whitehall, OH 43213	614/235-0265
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PENNSYLVANIA (W)	MANDABACH-LEHNER CO.	1221 Temple Tr.	Stow, OH 44224	216/686-1965
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PERMA POWER Electronics Inc.

March 18, 1980

T. Nelson
Box 3
Schooleys Mountain, NJ 07870

Thank you for your interest in Perma Power Sound Products. Enclosed is our current catalog which describes the most complete line of portable sound equipment available.

A listing of our sales representatives has been included, with the name of the representative in your area encircled. Your request for information has been passed on to him, and he will have the nearest dealer contact you promptly to provide any assistance you may need in making a final selection.

The proof is in the hearing, so we know you are going to be very pleased with the professional performance of Perma Power Sound Systems, the ease of operation and the variety of application.

If I can be of any further assistance, please let me hear from you.

Sincerely,



Norman Ackerman
President

NAA:dg

Encl. SC0104/SP109

cc: Landau & Mack

Consider these advantages of “packaged” portable sound

You get “matched” components

Speakers, amplifiers, microphones all pre-selected to work well as a system.



**Effective where voice
reinforcement is
needed often—but
in different places.**



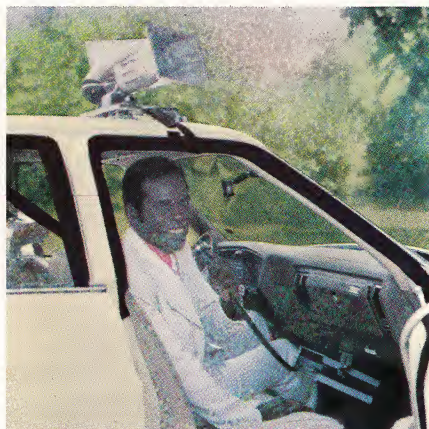
Convenient in rooms not originally intended to need voice reinforcement

For example, a lunch room used occasionally for large meetings or multi-purpose rooms that do not always need public address units.



**Ideal for speakers
who travel from
place to place**

and don't want to be dependent on the sound system that might (or might not) be provided.



Use portable sound systems in

Schools



Auditoriums
Classrooms
Gymnasium
Lunchroom
Playing fields

Churches



Sanctuaries
Community Halls
Sunday School
Outdoors
Graveside

Hotels/Motels



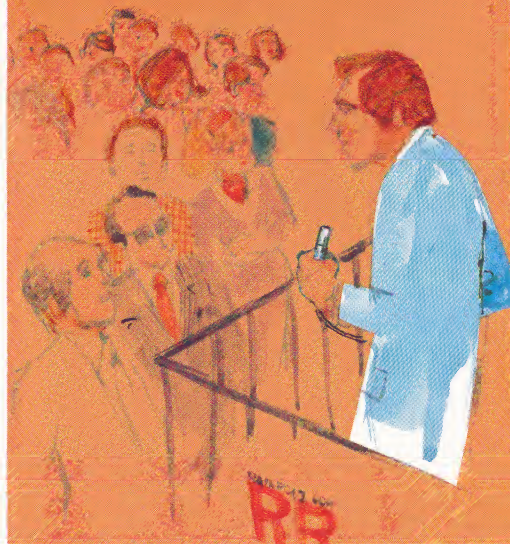
Restaurants
Banquets
Meetings
Paging
Poolside

Offices

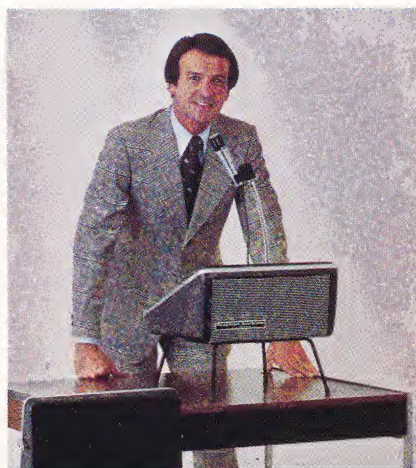


Conference Rooms
Sales Meetings
Training
Paging
Recreation

**or anywhere
the spoken word
must be heard!**



Perma Power® Sound Systems



Roving Rostrum

Model S-122



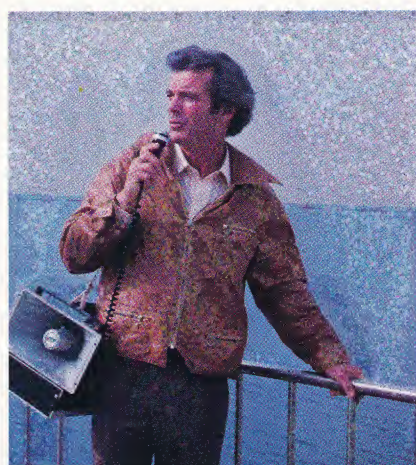
Sound Column Lectern

Model S-500



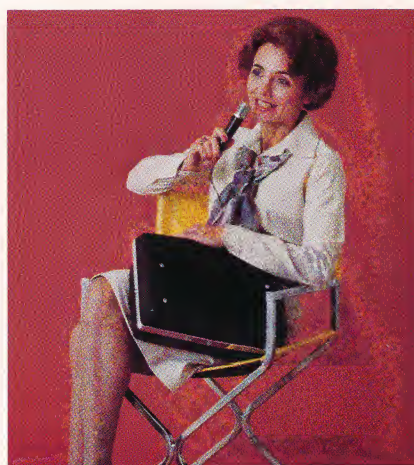
Modular Lectern

Models S-520/530



Half-Mile Hailer

Model S-610



Announcer

Model S-220



Sound Attaché P.A.

Model S-210A



Paging System

Model S-410



Sound Cruiser Mobile P.A.

Model S-310



Voice Carrier

Model S-230

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Electronics Inc.

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Chicago, Illinois 60648
Telephone (312) 647-9414

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